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(54) Title: **DEPLETION OF ENDOGENOUS PRIMORDIAL GERM CELLS IN AVIAN SPECIES**

(57) Abstract: Methods for modulating primordial germ cell (PGC) numbers and/or development in avians are provided. In one embodiment, the presently disclosed subject matter provides a method for modulating primordial germ cells numbers in an avian embryo comprising immunizing a female bird with an antigen associated with primordial germ cells, whereby an egg produced by the female bird comprises a sufficiently high concentration of antibodies specific for the antigen to modulate numbers of endogenous PGCs in an avian embryo present within in the egg. Also provided are methods for producing chimeric avians, methods for increasing the proportion of male birds in a plurality of eggs, methods of producing avian gametes, and methods for enhancing germ line transmission of nucleic acids in birds.



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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/01568

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C12N 15/85; A01K 67/00

US CL : 435/325; 800/19

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 435/325; 800/19

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
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## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	VICK et al. Germ-line chimaeras can produce both strains of fowl with high efficiency after partial sterilization. J. Reprod. Fert. July 1993. Vol. 98. No. 2. pg 637-641. See entire	1-57
A	BRESLER. Manipulations of germ-cell populations in the gonad of the fowl. Poultry Sci. May 1994. Vol. 35. No. 2, pg 241-247. See entire article.	1-57
A	US 6,354,242 A (PARDUE) 12 March 2002, col. 6, lines 40-55.	1-57



Further documents are listed in the continuation of Box C.



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